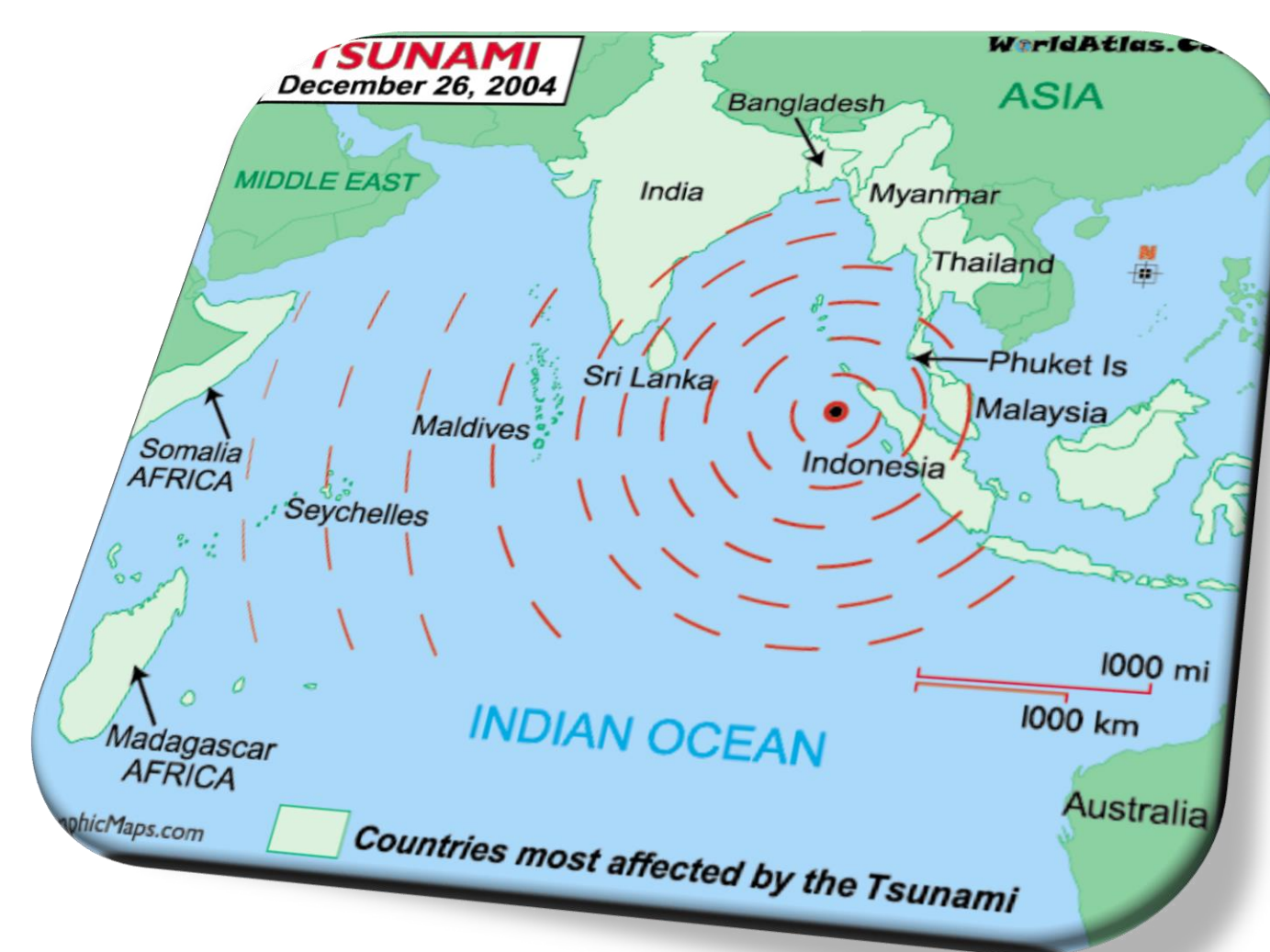


Disaster and Recovery - The Effects of Post-Disaster Aid on Economic Development



Abstract

An analysis of various charities, NGOs, and foreign aid and their effects on economic development in areas affected by them. We observe the changes in areas before and after natural disaster. By drawing on the comparison's we can empirically analyze the Samaritan's Dilemma put forth by James Buchanan. We can observe through the data that while charity actions can help in the short term, they can lead to long term dependencies. By providing necessary services for free, charities undermine local entrepreneurs and hinder industry and business creation. Without businesses to sustain a community, people are unemployed and, hence, cannot purchase goods. Subsequently, charities see this hardship that people are facing and seek to help them, and so the cycle continues. While we may assume that charities act with benevolent intent and without corruption, we can still see this issue arising. There is an optimum point of aid in which communities can survive hardship just enough to recover and begin sustaining themselves, but any aid beyond this point removes profits from the markets and dissuades entry. Thus, the optimum point of aid is the point in which local individuals can realize the profits and obtain them, without removing the profits. This problem is exacerbated by the substantial need that is created by natural disasters. The effects of short-term aid may help revive an economy, but too much may be detrimental.

Underlying Theory and Prior

The loss of industry emanates from a crowding out issue. Consider an example where a charity is willing to come to an area to build houses. Likely, there is someone with the skills and ability to create houses locally; their level of quality may be lower than the charity's, but these local builders are capable. The charities add an issue for local businesses, the charities will do the work for free, or at a heavily reduced cost. Let's assume that the local builders were building houses at a given rate, and then charities arrive and are willing to build houses free or at a reduced rate. Who are local consumers likely to pick? The cheaper option more than likely. Thus, the local builders lose out on sales. If this trend continues, the local builders may be crowded out by the charities. Similarly, a business may not start up if they believe a charity may simply show up and undercut them.

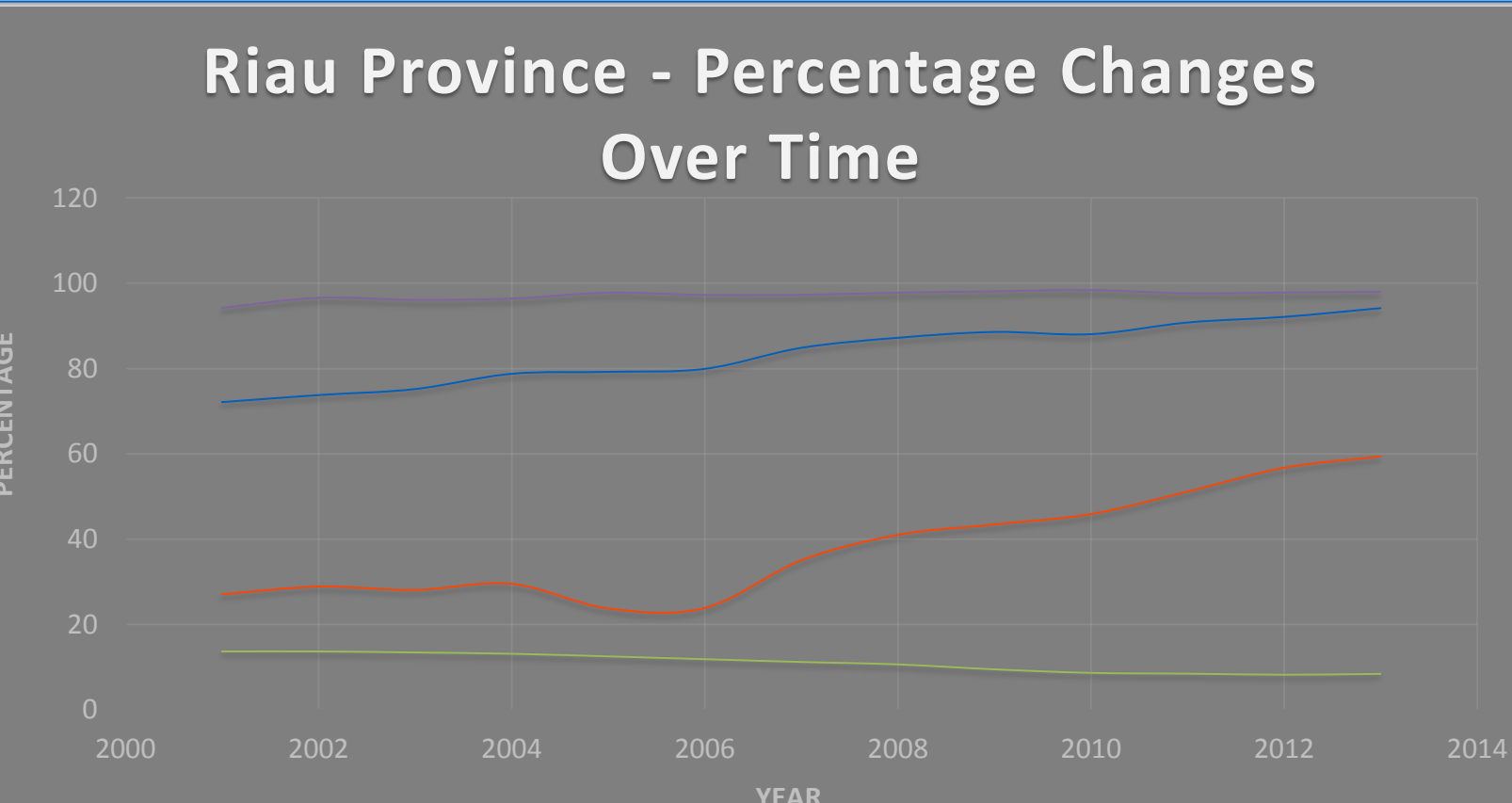
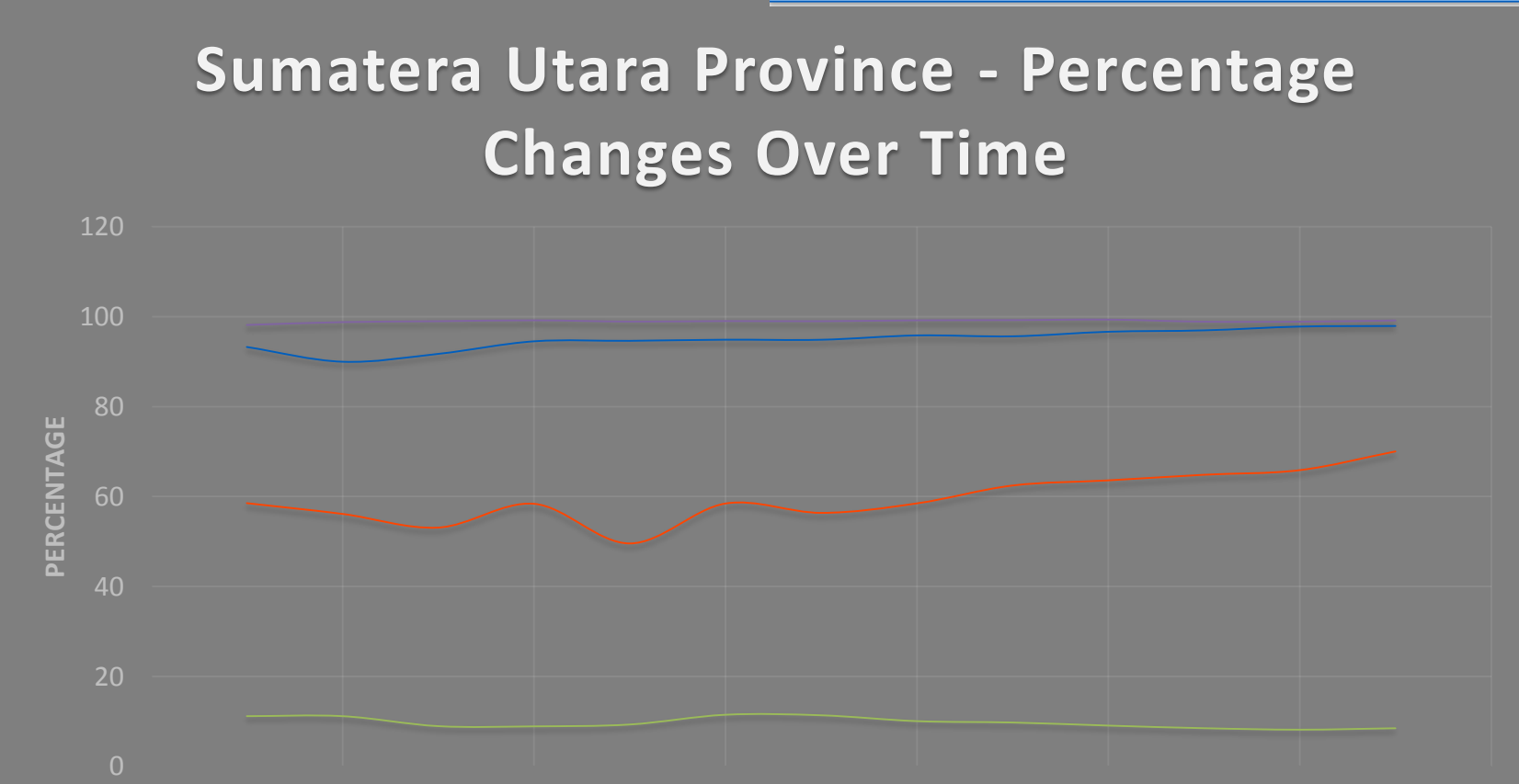
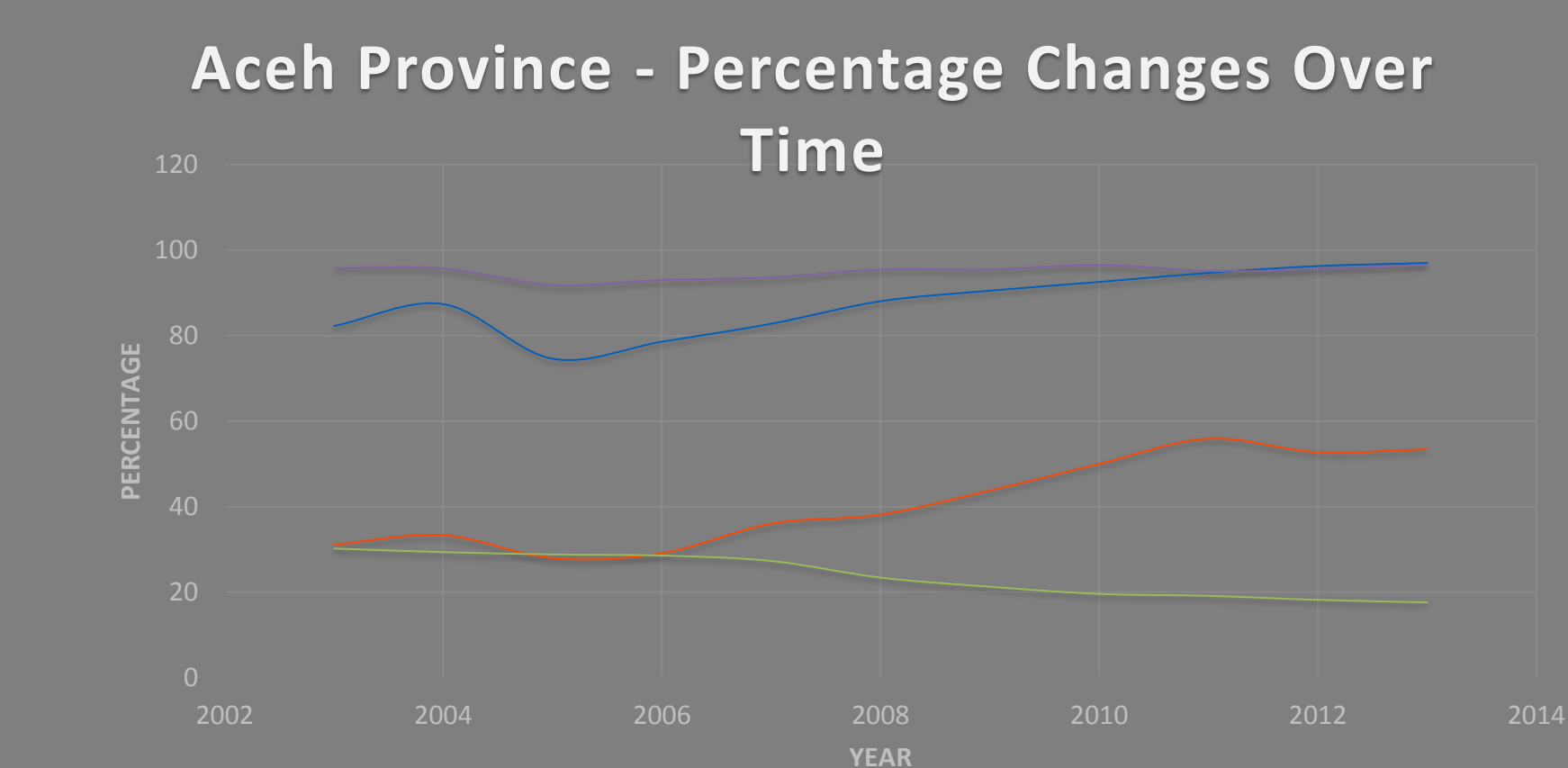
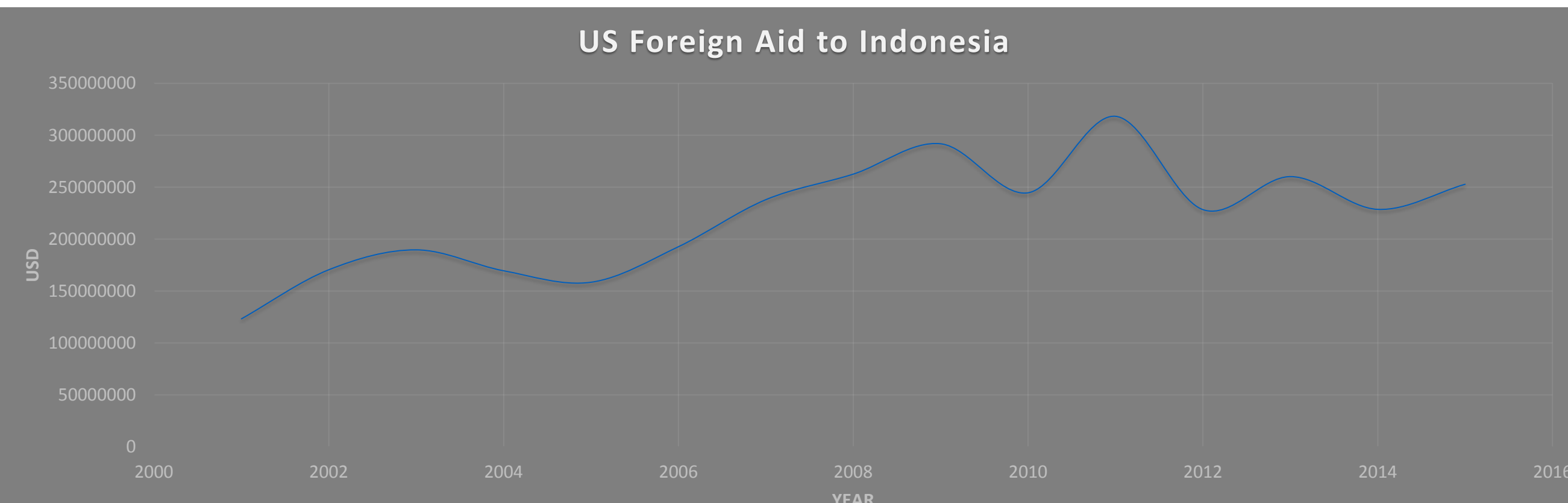
The theoretical framework for this issue is laid out perfectly by Calmette & Kilkenny (2002). They illustrate how charities, in times of calamity or disaster, skew the incentives of the local populace. They outline that even in times of disaster, despite developing nations needing assistance, the long-term effects of charity involvement can often do substantial harm to the local economy. Their research further examines the effects of situations caused by moral hazard, complete information, and adverse selection. Oftentimes, charity involvement is necessary, but many issues such as moral hazard or adverse selection make it difficult to assign aid to the correct country. They conclude that these excess costs are borne heavily by the neediest of nations. They highlight issues of exploitation resulting from charity involvement, but also help lay some of the framework for optimal charity involvement.

Method

We begin this process by examining four nations that experienced natural disasters in the 21st century: we have selected Indonesia, Pakistan, Afghanistan, and Myanmar. By utilizing regional data and the disaster as a natural experiment, we can examine various effects. We first establish the variation in regions affected relative to unaffected regions, both before and after the disaster. This allows us to control for national changes that would effect everyone. Secondly, we examine the changes from before and after the disaster, allowing us to examine the effects of not only the disaster, but the influx of aid. We pull our aid data primarily from the USAID.gov and other major charities such as the Red Cross. The US is a major supplier of foreign aid in the world, and since we are focusing on changes in aid, we can use the US aid contributions as a signaling tool to indicate other donors and their changes.

Sources

Calmette, M., & Kilkenny, M. (2002). INTERNATIONAL CHARITY: FOR THE POOR? *Economic Inquiry*, 497-507.



— Household Access to Electricity: Total (in % of total household)
— Household Access to Safe Water (in % of total household)
— Poverty Rate (in % of population)
— Literacy Rate for Population age 15 and over (in % of total population)

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